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srch_pp	*	****
Copyright (c) 1993-1998 University of Eqinburgh, U.K. Distribution rights by Oxford Molecular Ltd srch_pp protein - protein database search, using Smith-Waterman algorithm	Release 3.1A John F. Collins, Biocomputing Research Unit.	***************************************
itermar		*****
n algorithm		****

MPS

Tabular output not generated. Run on: Sat May 13 10:22:35 2000; MasPar time 3.95 Seconds 258.173 Million cell updates/sec

Title:

Description: Perfect Score:

Sequence: >US-09-331-631-5 (33-75) from US09331631.pep (2 of 4) 343 1 NQEDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEEEY 43

Scoring table: PAM 150 Gap 11

Searched: 188963 seqs, 23686106 residues

Post-processing: Minimum Match Listing first 0% 45 summaries

Database: a-geneseq35 1:geneseqp

Statistics: Mean 22.157; Variance 99.354; scale 0.223

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

100 110 112 113 113 114 115 117 119 220 220 23		Result
1000 1000 1000 1000 888 883 883 883 883 883 883 799 799 799	3337 3337 1555 11355 1149	Score
22222222222222222222222222222222222222	100.0 100.0 98.3 45.2 45.2 33.7	Query Match 1
533 353 6326 6326 6326 6326 6441 107 107 108 108 108 108 108 108 108 108 108 108	7 55 55 55 55 55 55 55 55 55 55 55 55 55	Length
		DB
W62836 R21079 R21079 W628150 W6281705 R91705 R41705 R41875	W62830 W62828 W62829 W62831 R20181 R62832 W62841	ID
Zea mays antimicrobial Zea mays antimicrobial maize pe peanut allergen Ara hi Hordeum vulgare antimi AcaNAP24. AcaNAP24. Steroid hormone recept Peroxisome proliferato Arachis hypogaea antim Peanut allergen Ara hi XR4. Mouse peroxisome proliferato Human androgen recepto Androgen receptor.	Macadamia integrifolia Macadamia integrifolia Macadamia integrifolia Theobroma cacao antimi Sequence encoded by 67 Gossypium hirsutum ant Stenocarpus sinuatus a	Description
2.026-02 8.17e-02 4.40e-01 3.96e+00 6.80e+00 9.73e+00 9.73e+00 9.73e+00 9.73e+00 9.73e+00 1.98e+01 1.98e+01 1.98e+01 1.98e+01	1.45e-22 5.15e-22 7.86e-22 1.09e-05 1.09e-05 5.57e-04 1.22e-02	Pred. No.

RESULT
ID WE
AC WE
DT 277
DE ME
KW AI
OS ME
FT PE

Peptide Key

/note= "signal peptide" Location/Qualifiers

W62828 standard; Protein; 666 AA.
W62828;
27-0CT-1998 (first entry)
Macadamia integrifolia antimicrobial protein.
antimicrobial protein; infestation; control.
Macadamia integrifolia.

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. 4.

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
73	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	75	75	75	76	76
21.3	٠		21.6	٠	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.9	21.9	21.9	22.2	22.2
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Murine VRF167.	Human laminin B1 chain	Heart vascular endothe	Murine vascular endoth	AceNAP4.	Murine vascular endoth	Heart vascular endothe	Human vascular endothe	Human VEGF-B full leng	Human VEGF-B truncated	Vascular endothelial g	Murine vascular endoth	Rabbit beta-8 intergin	Human peroxisome proli	DNA-binding/dimerisati	Human androgen recepto	Soybean glycinin A3B4					
5.63e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	4.74e+01	3.98e+01	3.98e+01	3.98e+01	3.35e+01	3.35e+01

ALIGNMENTS

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RESULT
ID
W62830;
AC
W62830;
DT
27-CCT-1998 (first entry)
DE
Macadamia integrifolia antimicrobial protein.
NW
Antimicrobial protein; infestation; control.
OS
Macadamia integrifolia.
FH Key
I. 28
FT Peptide
FT
Protein
FT
Protein
PN
W09827805-A1
PD
02-JUL-1998.
PE
22-DEC-1997; AU0874.
PR
20-DEC-1996; AU004275.
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
PA (PRI) 98-37279/32.
DR
N-PSDB; V42316.
PT
Novel anti-microbial protein from e.g. Macadamia
PT
Useful for controlling microbial infestations of
PS
Claim 1; Page 43-45; 96pp% English.
CC
De used to control microbial infestations in plar
CC
animals.
SQ
Sequence
625 AA;
    δõ
                                                   밁
                                                                                            Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 43; Conservative
                                                                                                                                                                                                            Novel anti-microbial protein from e.g. Macadamia integrifolia useful for controlling microbial infestations of plants or mammals claim 1; Page 43-45; 96ppW English.

The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.
                                                                                                                                                                                                                                                                                                                                                  W09827805-A1.
02-JUL-1998.
22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
WPI; 98-377279/32.
N-PSDB; V42316.
Score 343; DB 1; L
Pred. No. 1.45e-22;
0; Mismatches 0;
                                                                                                                                      Length 625;
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TRESULT
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PROWEDER
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Best Local
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Best Local :
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The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-JUL-1998.
22-DEC-1997;
20-DEC-1996;
                  Theobroma cacao. wo9827805-A1.
                                                           Theobroma cacao antimicrobial protein antimicrobial protein; infestation; co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            useful for controlling microbial infestations of plants Claim 1; Page 34-36; 95pp; English.
The sequence is that of an antimicrobial protein which be used to control microbial infestations in plants and
                                                                                                               27-OCT-1998
                                                                                                                                  W62831 standard;
W62831;
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                      animals.
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22-DEC-1997; AU0874.
20-DEC-1996; AU-004275
(RETR-) COOP RES CENT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; V42310
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BOWER NI, Goulter KC, Green JL, Manners JM, Marcus JP,
WPI; 98-377279/32.
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                                                                                                                                                                                                                                                                       74 NQDDPQTDCQQCQRRCRQQESGPRQQQYCQRRCKEICEEEEEEY 116
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                                                                                                                                                                                                                                                  NQEDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEEEY 75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard;
                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                            40;
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AU-004275.
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/note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "signal peptide"
                                                                                                                                                       Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein;
                                                                                                                                                                                                                                                                                                                                                            97.78;
93.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TROPICAL PLANT PATHOLOGY. Green JL, Manners JM, Mar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antimicrobial protein
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2;
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Pred.
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Pred. No. 7.
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                                                                                                                                                                                                                                                                                                                                         Mismatches
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No. 5.15e-22;
                                                                  control.
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7.86e-22;
                                                                                                                                                                                                                                                                                                                                                                                  Length 666;
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RESULT
ID WE
AC WE
DT 257
DE GC
KW at
PN WE
PD 0.0
PF 2.2
PR 2.2
PR 2.0
PD 0.0

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Best Local S
Matches 1
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Best Local
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Claim 4; Fig 2; 59pp; English.

The inventors claim a 67 kD and 31 kD T. cacao protein, and fragments, and encoding DNAs. The 47 kD and 31 kD proteins are derived from the 67 kD precursor. T. cacao protein cDNA was detected in a cDNA library prepared from immature cocoa beans RNA using a probe based on the AA sequence of a CNBr peptide common to the 47 kD and 31 kD polypeptides. Homology searches revealed close homologies between the 67 kD polypeptide and the vicilins, which are
                                                                                                                                                                                                                                                                                                                                                   W62832;
27-OCT-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUN-1991; G00914.
11-JUN-1990; GB-013016.
(MRSC ) MARS UK LTD.
Spencer ME, Hodge R, Deakin EA, Ashton
WPI; 92-024418/03.
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The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
BOWEI NI, Goulter KC, Green JL, Manners JM, Marr
HPI; 98-37779/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                    W62832
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R20181;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         34 QEDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEE
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ce encoded by 67 kD T. cacao protein cDN
flavour; vicilin; seed storage protein.
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larity 47.5%;
Conservative
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Pred. No. 1.09e-05;
9; Mismatches 12
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Pred. No. 1.09e-05;
9; Mismatches 12
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antinacional fi Gossypium hirsutum. W09827805-A1. 02-UUL-1998. 22-DEC-1997; AUO874. 20-DEC-1996; AU-004275. (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.

Marcus JP;

antimicrobial protein; infestation; control. Gossypium hirsutum antimicrobial protein.

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W62841;
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The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.
                                                                                                             Novel anti-microbial protein from e.g. Macadamia integruseful for controlling microbial infestations of plants Claim 1; Page 58-60; 96pp; English.
The sequence is that of an antimicrobial protein which be used to control microbial infestations in plants and
                                                                                                                                                                                                                            02-JUL-1998.
22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
BOWER NI, GOULTER KC, Green JL, Manners JM, Mar
WPI; 98-377279/32.
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The sequence is that of an antimicrobial protein which can be seen to control microbial infestations in plants and mammalian be seen to control microbial infestations in plants and mammalian
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Stenocarpus sinuatus antimicrobial protein; infestation; contro.
Stenocarpus sinuatus.
WO9827805-A1.
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Zea mays antimicrobial protein.
antimicrobial protein; infestation;
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WPI; 98-377279/32.
Novel anti-microbial protein
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22-DEC-1997; AU0874.
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(RETR-) COOP RES CENT 1
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Novel anti-microbial
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|||| ::||: |||| :|| ||:|:
35 EDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEEE 74
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Pred. No. 5.57e-04;
8; Mismatches 10
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                                                                                                                                                                                                                                                                     Manners JM, Marcus JP;
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i. No. 1.22e-02;
i. no. 7;
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                                                                                                                                                                                         infestations of plants or man
  115; DB 1;
No. 2.62e-02;
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EP-465009-A.
08-JAN-1992.
05-JUN-1991; 305064.
05-JUN-1990; US-536127.
(PION-) PIONEER HI-BRED I
Duvick JP, Rood TA, Rao A
WPI; 92-010214/02.
                                                                                                                                                                                                                                       Use of maize seed peptide CMIII and DNA encoding it - for killing or inhibiting plant pathogenic microorganisms.

Example 2; Page 5; 21pp; English.

The peptide (SEQ ID NO 1) was purified from public corn variety B73 and propriety corn variety MH18. It is basic and has has a total mol. wt. of 3900 daltons. The peptide sequence was used to design probes which were used to screen a maize genomic or cDNA library. The isolated CMIII gene can be used to prepare an expression vector for prodn. of recombinant CMIII for use in controlling plant patho-
                                                                                                                                                                        genic organisms.
See also Q20272 and 3.
Sequence 35 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel anti-microbial protein from e.g. Macadamia integruseful for controlling microbial infestations of plants Disclosure; Page 60; 96pp; English.
The sequence is that of an antimicrobial protein which be used to control microbial infestations in plants and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPIC Bower NI, Goulter KC, Green WPI; 98-377279/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           r 9
W62836 standard; Protein;
W62836;
27-OCT-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antimicrobial Maize; CMIII;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R21079;
09-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09827805-A1.
02-JUL-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R21079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      animals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antimicrobial protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zea mays antimicrobial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 557
  43
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                                            6
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:|:|:|:::::::| | | |||:
43 QCQRRC-RQQESDPRQQQYCQRRCK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QCQRRC-RQQESDPRQQQYCQRRCK
                                            ECRRQCLRRHEGQPYETQECMRRCR 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard; Peptide;
                                                                                        Similarity
11; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33 AA;
                                                                                      29.2%;
larity 44.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   corn;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide,
pathogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TROPICAL PLANT PATHOLOGY Green JL, Manners JM, Man
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein.
infestation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \frac{\omega}{\omega}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 109; DB 1; Le
Pred. No. 8.17e-02;
                                                                                      Score 100; DB 1;
Pred. No. 4.40e-01;
9; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CMIII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ΑÃ
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  66
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     control
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               590
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                  Length
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plants or man
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                                                                                        Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mammals
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                        Gaps
                                                                                        1;
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RESULTION OF THE PRINCE OF THE
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(Its sequence was deduced from CDNA clone P41b (T76613), isolated from peanut seed cDNA using a primer (see T76616) based on an isolated Ara hI peptide (see W24206). The sequence shows significant homology with the vicilin family of seed storage proteins of other legumes. The allergen is recognised by serum IgE from a large proportion of individuals with peanut the hypersensitivity. Ara hI and Ara hII (see W24164) can be used to raise monoclonal antibodies which are used in a specific two-site MAD ELISA for the detection of Ara hI or Ara hII (claimed). IgE-chinding Ara hI antigen epitopes (see W24165-87) may be used in vaccines to protect against allergic reactions to peanut allergens, e.g. anaphylactic shock.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                           02-JUL-1998.
22-DEC-1997; AU0874.
20-DEC-1996; AU-004275.
(RETR-) COOP RES CENT TROPICA Bower NI, Goulter KC, Green J WPI; 98-377279/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-DEC-1997 (first entry)
Peanut allergen Ara hI.
Peanut seed storage protein; allergen; allergy; hypersensitivity;
vaccine; anaphylactic shock; immunotherapy; therapy;
monoclonal antibody; ELISA; analysis; Ara hI.
Arachis hypogaea strain Florunger.
                                             Novel anti-microbial protein from e.g. Macadamia integrifolia useful for controlling microbial infestations of plants or man Claim 1; Page 60-62; 96pp; English.

The sequence is that of an antimicrobial protein which can
     animals
                                                                                                                                                                                                                                                                                                                                    WO9827805-A1.
                                                                                                                                                                                                                                                                                                                                                                               Hordeum vulgare antimicrobial protein. antimicrobial protein; infestation; control
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W62837 standard;
W62837;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peanut allergens Ara hI and Ara hII - used two-site monoclonal antibody based ELISA Claim 31; Page 172; 354pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYAR-) UNIV ARKANSAS.
Bannon GA, Burks AW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB; T76613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09724139-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31 QKKTENPCAQRCLQSC-QQEPDDLKQKACESRCTKL 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QEDPQTEC-QQCQRRCRQQESDPRQQQYCQRRCKEI 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    on GA, Burks AW,
97-363453/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       h 25.7%;
Similarity 36.1%;
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          626
                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-009455.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23. .626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Protein; 637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /label-_Sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                     TROPICAL PLANT PATHOLOGY Green JL, Manners JM, Ma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cockrell G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "N-glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 88;
Pred. No.
6; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₿
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Helm RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; L
3.96e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for
                                                                                                                                                                                          Marcus JP;
                      plants and mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stanley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vaccination
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           peanut allergens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and
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                                                                                                                                                                                                                                                                      Proteins with anticoagulant and/or serine protease inhibitory
cactivity, isolated from nematodes, are useful to inhibit blood
coagulation. The proteins can be added to blood collection tubes
defining the collection of mammalian plasma. They are also useful
to prevent or inhibit thrombosis, and may be given alone or in
combination with other therapeutic or in vivo diagnostic agents.
The proteins can serve as immunogens to raise antibodies for use in
the diagnosis and identification of NAP concn. levels in biological
fluids, e.g. to detect mammalian infection with a parasitic worm.
They can also be used as immunogens in prophylactic and therapeutic
vaccines against parasitic worm infection. The proteins may
double the clotting time of human plasma in prothrombin time assays
when present at 10-50 nMol, and double the clotting time of human
plasma in activated partial thrombin time assays when present
                                                               Best Local
Matches
                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bergum PW, Gansemal
Lauwereys MJ, Mess:
Vlasuk GP;
WPI; 96-222007/22.
N-PSDB; Tl2952.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ancylostoma caninum.
W09612021-A2.
25-APR-1996.
17-OCT-1995; U13231.
18-OCT-1994; US-32611(
05-JUN-1995; US-48639)
05-JUN-1995; US-48639)
05-JUN-1995; US-46538(
                                                                                                                                                         The anticoagulant proteins are pref. derived from Ancylostoma caninum, A. ceylanicum, A. duodenale, Necator americanus or Heligomosmoides polygyrus.

The proteins pref. have 2 NAP domains and specifically inhibit the catalytic activity of the factor VIIa/TF complex in the presence of factor Xa or a catalytically inactive factor Xa deriv., do not specifically inhibit the activation of factor VIIa in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nematode-extracted anticoatulant prot nematode; thrombosis; parasitic worm.
                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Proteins with anticoagulant and/or serine protease inhibitory activity - isolated from nematodes and useful to inhibit blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AcaNAP24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R91706 standard;
R91706;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                              absence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      coagulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AcaNAP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-NOV-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CORV-)
   61
                                 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42 QQCVQRCRQ-ER-PR---YSHARCVQECRDDQQ 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
 CORRCK-EICEEEEEY
                               CERKCKIETSEEEDDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QQCQRRCRQQESDPRQQQYCQRRCKEICEEEEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   221; Fig 13B; 243pp; English.
                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORVAS INT INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HponAP; NamNAP; AceNAP; AduNAP; anticoagulant;
e-extracted anticoagulant protein; serine prote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
14; Conser
                                                                                                                                            TF and do not specifically inhibit prothrombinase
                                                                                                                               106 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      637 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-326110.
US-326110.
US-486399.
US-461965.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24.8%;
ilarity 42.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gansemans YGJ,
, Messensjhl,
                                                                 Conservative
                                                                            24.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 85; DB 1;
Pred. No. 6.80e+00
7; Mismatches
                                                               Score 83; DB 1; I
Pred. No. 9.73e+00;
4; Mismatches 2
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                                                                                           Length 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 637;
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RESULT

R91705 standard; Protein; 107 AA R91705; 17-NOV-1996 (first entry)

AcaNAP23

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RESULT RANGE RESULT RANGE RANGE SI CONTROL S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CC Proteins with anticoagulant and/or serine protease inhibitory activity, isolated from nematodes, are useful to inhibit blood coagulation. The proteins can be added to blood collection tubes defining the collection of mammalian plasma. They are also useful to prevent or inhibit thrombosis, and may be given alone or in combination with other therapeutic or in vivo diagnostic agents. The proteins can serve as immunogens to raise antibodies for use in the diagnosis and identification of NAP concn. levels in biological fluids, e.g. to detect mammalian infection with a parasitic worm. They can also be used as immunogens in prophylactic and therapeutic vaccines against parasitic worm infection. The proteins may could be the clotting time of human plasma in prothrombin time assays when present at 10-50 nMol, and double the clotting time of human plasma in activated partial thrombin time assays when present at 10-100 nMol.
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Matches 9; Conser
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17-CCT-1995; U13231.
18-CCT-1994; US-326110.
05-JUN-1995; US-486399.
05-JUN-1995; US-461965.
05-JUN-1995; US-465807.
05-JUN-1995; US-465380.
(CORY-) CORVAS INT INC.
29-SEP-1993.
23-MAR-1993; 006043.
24-MAR-1992; US-857055.
(MERI ) MERCK & CO INC.
Rodan GA, Rutledge SJ,
                                                                                                                                                                                           IT 15
R41875; standard; Protein; 441 AA.
R41875;
13-APR-1994 (first entry)
Steroid hormone receptor (NUCI).
Steroid; hormone; receptor; osteosarcoma; superfamily.
                                                                                                                                                     Homo sapiens.
GB2265376-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         americanus or Heligomosmoides polygyrus.

The proteins pref. have 2 NAP domains and specifically inhibit the catalytic activity of the factor VIIa/TF complex in the presence of factor Xa or a catalytically inactive factor Xa deriv., do not specifically inhibit the activation of factor VIIa in the absence of TF and do not specifically inhibit prothrombinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Proteins with anticoagulant and/or serine protease inhibitory activity - isolated from nematodes and useful to inhibit blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AcaNAP; HpoNAP; NamNAP; AceNAP; AduNAP; anticoagulant; nematode-extracted anticoagulant protein; serine protease; nematode; thrombosis; parasitic worm.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 96-222007/22.
N-PSDB; T12951.
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Vlasuk GP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The anticoagulant proteins are pref. derived from Ancylostoma caninum, A. ceylanicum, A. duodenale,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 221; Fig 13A; 243pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               coagulation
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llarity 56.3%;
Conservative
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J, Messensjhl,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A.
   Schmidt A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 83; DB 1; Ler
Pred. No. 9.73e+00;
4; Mismatches 2;
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Moyle M, Stanssens PEH;
   Vogel RL;
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Search completed: Sat May 13 10:22:43 2000 Job time: 8 secs.
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Best Local
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                                                                                                                                                              New human steroid hormone receptor NUCI - used to assay and evaluate ligands binding to the receptor Claim 5; Page 39-40; 62pp; English.

The steroid hormone receptor (designated NUCI) is used in a identify and evaluate chemical entities that bind to it. Seguence 441 AA;
                                                                                                                                                                                                                                                 WPI; 93-305586/39.
N-PDSB; Q48939.
                                                                               107
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ECQUCQRRCRQQESDPRQQQYCQ-RRC 65
                                                                             EYEKCERSCKIQKKNRNKCQYCRFQKC 133
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